ADVANCED STRUCTURAL COMPOSITES

CENTER

The objective of the Center for Advanced Structural Composites is to develop the commercial potential of the IsoTruss technology. The IsoTruss enables the creation of super lightweight grid structures with the potential for revolutionizing industries as diverse as civil infrastructure (e.g., communication and construction), aerospace, automotive, marine and sporting structures and virtually any application area requiring high strength, high stiffness, light weight and superb corrosion resistance.

TECHNOLOGY

The core technology consists of an ultralightweight composite structural shape known as the IsoTruss. The IsoTruss is a novel, patented, three-dimensional structural form that takes advantage of the highly directional properties of high strength composites to produce an extremely efficient and lightweight structure. The IsoTruss incorporates stable geometric configurations with helical members that spiral in opposing directions around a central cavity, coupled with longitudinal members that pass through the intersections.



BRIGHAM YOUNG UNIVERSITY

Can you imagine....

A power line transmission tower that can withstand extreme wind conditions, support tremendously heavy



loads, remain corrosion free, be unaffected by temperature extremes, and weighs significantly less than conventional steel towers?

ACCOMPLISHMENTS

Several companies are currently negotiating licensing agreements with BYU for the IsoTruss technology, and a new Utah firm has licensed the rights for domestic commercial applications. As the core technology matures, additional discoveries, applications, and developments will provide ever increasing requirements for research and opportunities for funding.

Contact Information

Director: David W. Jensen Brigham Young University 368 Clyde Building, Box 24066 Provo, Utah 84602 801-378-2094 david@byu.edu